CLAIMS

What is claimed is:

1. A method, comprising:

evaluating processor state information associated with a processor; and

managing one or more virtual machines using the processor state information.

2. The method of claim 1, further comprising:

monitoring the processor; and

gathering the processor state information.

3. The method of claim 1, further comprising changing time quanta assigned to the one or more virtual machines if triggered by the processor state information.

4. The method of claim 3, wherein the changing comprises increasing or decreasing the time quanta assigned to the one or more virtual machines.

5. The method of claim 1, wherein the processor state information comprises at least one of the following: characteristics of the processor, history of the processor, characteristics of the one or more virtual machines, history of the one or more virtual machines, event monitoring (EMON) data, and E86MON data.

6. The method of claim 1, wherein the managing comprises swapping between the one or more virtual machines using the processor state information.

7. The method of claim 1, wherein the managing is performed by a virtual machine manager (VMM) comprising a state management unit to evaluate the processor state information and manage the one or more virtual machines.

8. The method of claim 7, wherein the VMM is further to monitor the processor and gather the processor state information.

9. An apparatus, comprising:

a processor;

a virtual machine manager (VMM) coupled with the processor, the VMM having a state management unit to manage one or more virtual machines, coupled with the VMM, using processor state information.

10. The apparatus of claim 9, wherein the VMM is further to:

monitor the processor;

gather the processor state information associated with the processor; and

evaluate the processor state information.

11. The apparatus of claim 9, wherein the managing comprises swapping between the one or more virtual machines if triggered by the processor state information.

12. The apparatus of claim 11, wherein the swapping comprises increasing or decreasing time quanta assigned to the one or more virtual machines.

13. The apparatus of claim 9, wherein the processor comprises one or more processors having at least one of the following: microprocessors, hyperthreaded processors, digital signal processors, and microcontrollers.

14. The apparatus of claim 13, wherein the one or more processors comprise at least one of the following: microcode, macrocode, programmable logic, and hard coded logic.

15. The apparatus of claim 9, further comprising at least one of the following: a personal computer, a mainframe computer, a handheld device, a portable computer, a set-top box, an intelligent appliance, a workstation, and a server.

16. The apparatus of claim 9, wherein the one or more virtual machines comprise guest software, the guest software having at least one of the following: an operating system and a software application.

17. A system, comprising:

a storage medium;

a processor coupled with the storage medium;

a virtual machine manager (VMM) coupled with the processor, the VMM to monitor the processor and gather processor state information; and

one or more virtual machines coupled with the VMM, the one or more virtual machines managed by the VMM using the processor state information.

18. The system of claim 17, wherein the VMM comprises a state management unit to monitor the processor.

19. The system of claim 17, wherein the processor state information comprises at least one of the following: characteristics of the processor, history of the processor, characteristics of the one or more virtual machines, history of the one or more virtual machines, event monitoring (EMON) data, and E86MON data.

20. The system of claim 17, wherein the managing comprises changing time quanta assigned to the one or more virtual machines if trigged by the processor state information.

21. The system of claim 17, wherein the processor comprises one or more processors having at least one of the following: microprocessors, hyperthreaded processors, digital signal processors, and microcontrollers.

22. The system of claim 17, further comprising at least one of the following: a personal computer, a mainframe computer, a handheld device, a portable computer, a set-top box, an intelligent appliance, a workstation, and a server.

23. The system of claim 17, wherein the one or more virtual machines comprise guest software, the guest software having at least one of the following: an operating software and a software application.

24. A machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a machine, cause the machine to:

evaluate processor state information associated with a processor; and

manage one or more virtual machines using the processor state information.

25. The machine-readable medium of claim 24, wherein the sequences of instructions which, when executed by the machine, further cause the machine to:

monitor the processor; and

gather the processor state information.

26. The machine-readable medium of claim 24, wherein the sequences of instructions which, when executed by the machine, further cause the machine to change time quanta assigned to the one or more virtual machines if trigged by the processor state information.

27. The machine-readable medium of claim 24, wherein the sequences of instructions which, when executed by the machine, further cause the machine to increase or decrease the time quanta of the one or more virtual machines.

28. The machine-readable medium of claim 24, wherein the processor state information comprises at least one of the following: characteristics of the processor, history of the processor, characteristics of the one or more virtual machines, history of the one or more virtual machines, event monitoring (EMON) data, and E86MON data.

29. The machine-readable medium of claim 24, wherein the sequences of instructions which, when executed by the machine, further cause the machine to swap between the one or more virtual machines using the processor state information.

30. The machine-readable medium of claim 24, wherein the managing is performed by a virtual machine manager (VMM) comprising state management to evaluate the processor state information and manage the one or more virtual machines.